



# WORKING TOGETHER

In 1996, the National Park Service established or refined many partnerships that helped advance the state of natural resource management in parks. Some involved finding organizations interested in funding natural resource activities, while others concentrated on sharing resources to meet common goals. Without partners, we would not have access to some of the technical specialties needed in our work, yet lacking in our organization. But partnering goes beyond the exchange of funds and expertise. It fosters better interagency understanding and the discovery of common ground, promotes innovation, and galvanizes support in attacking complex issues. As has been the trend over the past several years, partnerships continue to be an area of expansion for the National Park Service and will continue to be critical to our success in natural resource management in the future.

## The teamwork trend in Hawaii

by Rick Potts

Funding and staffing levels combined with the continual reorganization of research scientists have increased the difficulty of accomplishing projects that protect natural resources throughout the national park system. Pressures on the resources themselves also continue to mount. In Hawaii, park resource managers and scientists have adopted a cooperative strategy to combine forces and expertise to complete urgent resource management projects, and the whole is definitely greater than the sum of its parts. In smaller parks, such as Kalaupapa National Historical Park, developing, organizing, and completing large natural resource management projects would simply not be possible, given the very small staff and logistical constraints, without the support of Hawaii Volcanoes and Haleakala National Parks, the University of Hawaii Cooperative Park Studies Unit (CPSU), the Pacific Islands Support Office, and the Pacific-West Region. Additional critical help has come from the NPS Water Resources Division and park field stations of the USGS Biological Resources Division (BRD).

Good examples of this cooperative spirit are evident in recent and ongoing fence enclosure construction

projects at Kalaupapa. With the assistance of the Haleakala BRD Field Station and the resource management staff of Hawaii Volcanoes, the park constructed a fence nearly 3 miles long around a volcanic crater containing rare, remnant, Hawaiian dryland forest. This forest was being severely degraded by marauding nonnative pigs and a rapidly growing population of nonnative axis deer. These efforts occurred just in time to save this very special resource, one of the last remaining dryland forests of its type. Newly sprouted seedlings of the native wili-wili tree are being seen in the crater for the first time in years since the exclusion of pigs and deer.

Another fence-building project was under way at Kalaupapa in 1996, this one designed to protect several federally listed endangered plant species and a fine example of native coastal strand vegetation. This area is being besieged by more than 500 axis deer nightly, and time is running out for the remaining coastal plants. Again, park partners have assisted with the vegetation surveys, management recommendations, administrative support, materials procurement, and construction of the mile-long fence.

With this kind of cooperative spirit, Hawaiian parks will continue to strive to accomplish more with less. There is no choice—native ecosystems in Hawaiian parks are being rapidly degraded, and the natural resources cannot wait.

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Hapu'u (*Cibotium glaucum*),  
a native fern at Hawaii Volcanoes  
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## Alternative funding Big rewards possible with corporate partners

by Lissa Fox

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To resource managers faced with limited staffs and budgets, partnerships can look a lot like the proverbial pot of gold at the end of the rainbow. Partnerships seem particularly irresistible when the potential partner is a large corporation with millions of dollars to donate. Once park managers stop imagining all the good work they could accomplish with such donations, however, the questions began to arise. What are the costs associated with these gifts? Could corporate partnerships tarnish the pristine image of the National Park Service? Would resource managers have to compromise established management priorities based on corporate needs?

These and many more questions were asked when the National Park Service entered into a partnership with Canon U.S.A., Inc., and the National Park Foundation in 1995. The program, called Expedition Into the Parks, brings together volunteers, the National Park Foundation, Canon, and the parks to advance natural resource management in the parks and to educate the public concerning NPS natural resource issues. In Expedition, none of the previously mentioned concerns came about; in fact, the program has been an unqualified success.

What has the Park Service received from this partnership? The National Park Service gets direct financial support for natural resource management work in the parks. In 1995, Expedition funded 20 biological inventory and monitoring projects. In 1996, 15 of the original 20 projects received second-year funding to conduct restoration work based on the information gathered the first year and to produce educational materials in conjunction with the projects. Total funding for the 1995-96 program was over \$1 million (including dollars and equipment). Fourteen parks will benefit from Expedition's \$1.1 million program in 1997.

The National Park Service also received extensive media coverage of natural resource issues, resulting in raised public awareness of the preservation challenges the parks face. Newspapers around the country covered



Santa Monica Mountains National Recreation Area

Scientists prepare a photography station that will allow a large mammal to trip the shutter and take its own picture. The study in Santa Monica Mountains National Recreation Area, California, provides an alternative to traditional mark and recapture methods of estimating species population sizes.



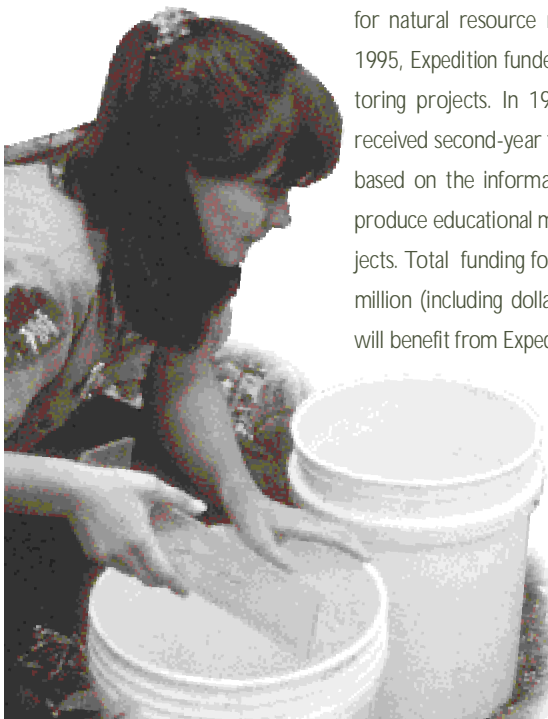
Great Smoky Mountains National Park

Volunteers and NPS staff work shoulder-to-shoulder in Great Smoky Mountains National Park electroshocking and removing nonnative rainbow trout from Mannis Branch, a tributary of the Little Tennessee River.

Expedition projects, including lengthy articles in the New York Times, the Los Angeles Times, and the Washington Post, and national network news also covered the story. Canon also financed one million copies of a four-color brochure, "Parks In Jeopardy," designed for park visitors. The brochure explains the complexity of park resource issues and the need for research-based management.

Was the noncommercial image of the National Park Service threatened by the partnership? Not at all. Early and exhaustive discussions among all partners facilitated understanding and compliance with all NPS policies and guidelines. These policies and guidelines are designed to protect the agency's image and to ensure adherence to federal ethical standards. Following them carefully

Counts revealed that 524 rainbow trout were removed from the stream, greatly reducing competition for 105 native Appalachian brook trout subsequently restored to the stream in the pilot project funded by Canon USA.



protects the parks while giving corporations an admirable way to express their support of the national parks.

What about fulfilling NPS priorities? "Cause-related marketing," which comes from a company's marketing budget, now drives many corporate donations. In cause-related marketing, corporations receive a marketing benefit from association with a good cause, such as the parks. However, to be effective for the company, the donation has to be visible. Therefore, asking a corporation to fund noncharismatic work or a project in a little-known park will always be a challenge.

In Expedition, program managers mix and match high- and low-profile parks, complex and accessible projects,

well-known and obscure natural resource issues, and produce packages that please everyone. Canon gets a range of projects, with enough visibility to meet their marketing needs. The National Park Service gets complex, scientifically sound natural resource management projects in large and small parks.

What does this partnership cost the National Park Service? Time. Time spent working with the Foundation and Canon to build an understanding of resource management needs. Time spent telling the public about the desperate problems park natural resource managers face daily. Time spent getting conservation work on the ground.

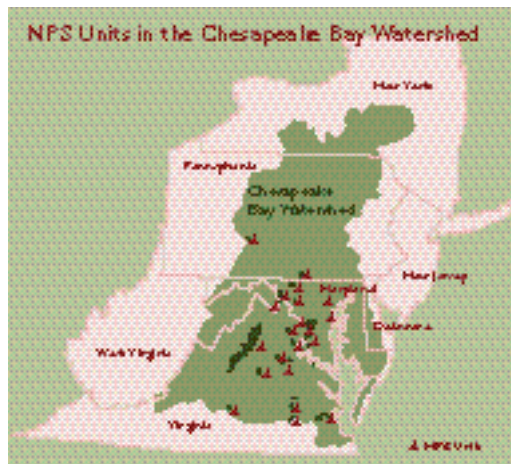
Time well spent.

## Partnerships and interagency cooperation The Chesapeake Bay Initiative

by Chuck Rafkind, Kathleen Picarelli,  
and Bob Campbell

**L**argest of all estuaries in the United States, the Chesapeake Bay has been losing its wonderful biodiversity and abundance of life for decades. To aid in its rehabilitation, the National Park Service signed a memorandum of understanding with the Environmental Protection Agency (EPA) in 1993 and became a formal participant in the Chesapeake Bay Program (CBP), a regional partnership at work since 1983 to restore the estuary. Within the watershed of the Chesapeake Bay are 47 units of the national park system, totaling 286,000 acres. In joining the program, we agreed to help restore and protect the bay, both inside and outside park boundaries.

We strengthened our commitment the following year by signing the Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay. This pact formalized the role of federal agencies in the CBP and established policies on nutrient and toxic pollution reduction, habitat restoration, and coordination of research. That year we also published the NPS Chesapeake Bay Action Agenda. This document outlined our programs, expertise, and objectives for enhancing the resources in the watershed.



Largest estuary in the United States, the Chesapeake Bay drains a watershed covering six states and containing 47 units of the national park system. It is being preserved through the Chesapeake Bay Program.

Since then, we have participated in interagency team efforts to conduct site assessments of several parks and many other federal installations. The inspections identify hazardous materials and deal with issues related to the sound management of storm water, vegetation, nutrients, and pests.

In February 1996, a National Park Service task force, established the previous year to oversee our involvement in the program, hosted an orientation to the Chesapeake Bay Program. Held during the National Capital Region's superintendent conference, the orientation sought to define the role parks can play in restoring, protecting, and interpreting the resources of the Chesapeake Bay watershed. As a result, many

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Colonial National Historical Park

College Creek, a wetland habitat of the Chesapeake Bay at Colonial National Historical Park, Virginia.

parks have implemented interpretive and natural resource programs that relate to the Chesapeake Bay. Also, NPS staff are becoming more active in CBP committees, even in these times of austere budgets and staff.

Last September, we reached another milestone in support of the program when our first formal liaison was established at the EPA Chesapeake Bay Program office in Annapolis, Maryland. The liaison represents the Park Service on key committees, coordinates informa-

tion transfer and technical assistance between parks and the program office, and is the principal NPS planner in the Chesapeake Bay watershed.

Partnerships are becoming the backbone of park management. This partnership is an opportunity to improve the stewardship of our lands and restore the resources of the Chesapeake Bay watershed. It also provides a vision of good stewardship and sustainability and is the catalyst for integrating sound management practices into the larger context of the ecosystem.

## Regional air quality partnerships

by Erik Hauge

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**R**egional air quality partnerships are voluntary, ecosystem-oriented, cooperative groups of federal land management agencies and other organizations that have united to deal with air pollution and its impacts on air pollution-sensitive resources in a region. The partners share air quality-related activities such as monitoring, research, regulatory review, and outreach. They develop consensus positions on issues, which allow the partners to speak with a unified voice and have greater clout with air pollution control agencies than they would have individually. They also complement the permit review process established under the Clean Air Act. Permit review focuses on individual (new) sources of air pollution, while the partnerships focus on

multiple existing sources (the major cause of air pollution on resources).

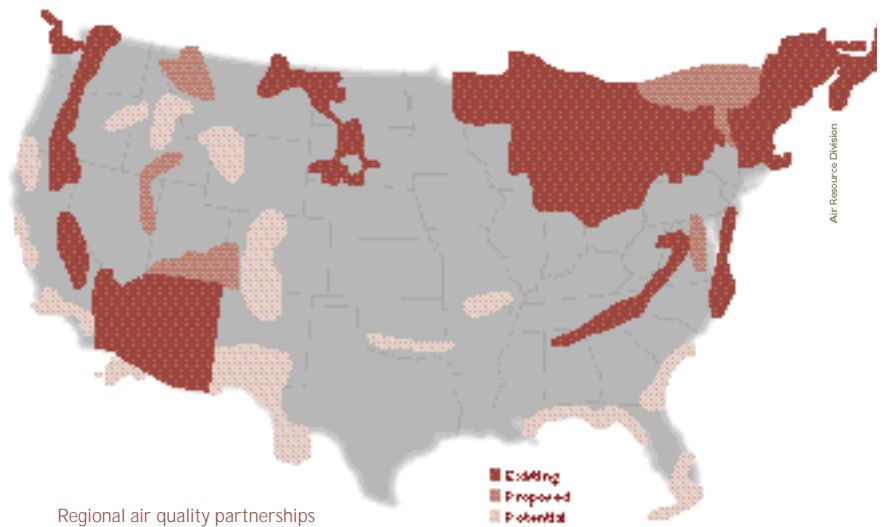
The first such partnership was organized in 1990 in the Sierra Nevada (Sierra Federal Clean Air Partnership) in California. In 1991, the Park Service and Forest Service established the second partnership in the southern Appalachian Mountains, which has been superseded by the Southern Appalachian Mountains Initiative, a more comprehensive organization. Others have been or are being organized in the Cascades, the northern Great Plains, Arizona (the Arizona Federal and Tribal Clean Air Partnership), and the California-Nevada desert, as well as with Canada in the Atlantic Canada-northern New England region (North-eastern Regional Air Quality Committee) and the Great Lakes. Still others have been proposed in other ecosystems.

Some significant achievements of partnerships include a permanent representative of the Sierra partnership that sits on their regional air quality advisory board. In 1995,



this partnership produced an award-winning videotape and teachers' guide on air pollution in the Sierra, and distributed it to regional schools. In 1996, it published a report summarizing air-quality related activities. A similar report was published in 1996 for the southern Appalachians and was submitted to the Southern Appalachian Mountains Initiative. An air quality assessment for the Northeastern Regional Committee is at press. In 1996, the Arizona Federal and Tribal Clean Air Partnership began to include air-quality related training in its semi-annual membership meetings.

The outlook is excellent. Regional air quality partnerships are productive and will help lead the way toward cleaner air in the parks.



## Working with the U.S. Geological Survey Partnership with the USGS

by Lindsay McClelland

**T**he National Park Service and the U.S. Geological Survey (USGS) have a long history of cooperation on a broad range of geological programs. A recent memorandum of understanding has paved the way for the development of new programs, particularly in geologic mapping and public education.

The USGS began new geologic mapping, interpretation, and resource management projects in more than a dozen parks in 1996. Supported through their National Cooperative Geologic Mapping Program, these projects were selected from more than 40 submitted by parks. Numerous additional USGS projects in parks continue as elements of ongoing efforts ranging from coastal erosion studies to geologic hazards monitoring.

Some of the new projects include the following:

1. **Ozark National Scenic Riverways, Missouri**—Detailed bedrock and fracture mapping to help assess subsurface water flow feeding the parks world-class springs, and to better characterize serious threats from nearby lead mining
2. **Shenandoah National Park, Virginia**—A detailed study of landslides, debris flows, and flooding triggered by a major June 1995 storm to include assessment of the potential for recur-

rence elsewhere in the park. Additional surficial studies will link geology with the effects of acid rain on park ecosystems

3. **C&O Canal National Historical Park, Washington, D.C., Maryland, and West Virginia**—A geologic map of the entire 181-mile park length to be used for park planning, public outreach, and the development of exhibits. The severe flooding of 1996 reemphasizes the importance of incorporating geological information into protection of key park resources
4. **Grand Canyon National Park, Arizona**—An array of educational products developed with USGS help to illuminate one of the world's most spectacular geological park stories for students and visitors, while geologic mapping continues to expand our knowledge of the nearly 2-billion-year park history

Geologists at the Geological Survey also continue to make key contributions to the safety of park visitors, staff, facilities, and neighbors with studies of geologic hazards. After the fatal summer 1996 rock fall at Yosemite National Park, California, USGS scientists responded quickly to assess the event and risk of future rock fall, building on years of detailed mapping. At Mt. Rainier National Park, Washington, an interdisciplinary team of USGS geologists and hydrologists are studying potential hazards from future eruptions, glacial outburst floods, debris flows, and possible collapse of unstable portions of this volcano.

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# Water quality and biological monitoring in parks

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The National Park Service is engaged in efforts to strengthen its partnership with the USGS National Water-Quality Assessment (NAWQA) Program. During 1996, each agency spent about \$200,000 to pilot park issue-driven, water resource monitoring activities involving nine NAWQA study basins and 11 units of the national park system. Some park issues being addressed include: endocrine system disruption in fish at Lake Mead National Recreation Area, Nevada, urban development at Chattahoochee National Recreation Area, Georgia, and river restoration at Yosemite National Park, California. Additional park projects are planned for 1997; however, expansion of the pilot partnership into a sustainable program depends on future funding.

NAWQA is designed to assess, on a watershed basis, the status and trends in the chemical, physical, and biological quality of the nation's streams, rivers, and aquifers in relation to categories of water uses (e.g., agricultural, industrial). The program also is designed to assess, on a systematic basis, the effectiveness of federal and state water quality management programs, and to develop an improved understanding of the natural and human factors that affect water quality conditions.

While a small number of individual assessments of park water quality have occurred on a project-by-project

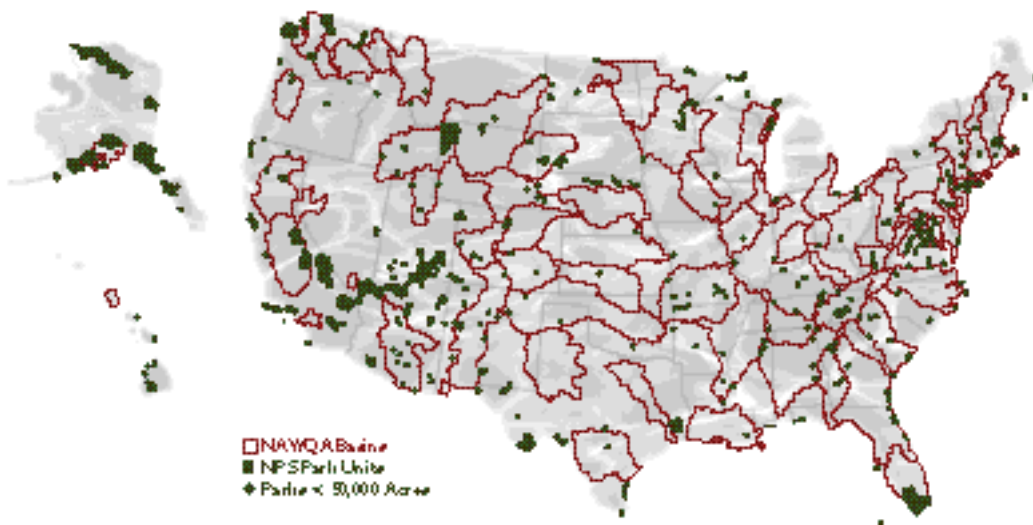
basis, the Park Service has no systematic or sustainable water quality assessment program. In addition, training and staff are inadequate for most parks to conduct and sustain their own water quality technical programs. Furthermore, we lack the organizational infrastructure to support these activities nationwide. The NPS-NAWQA partnership fills this void by providing a sustainable, standardized program of water quality data acquisition in parks that will permit objective, periodic assessments of the status of water quality in parks, and enable us to address our most pressing water quality protection problems. The partnership matches the water quality technical capabilities of the U.S. Geological Survey with the water quality management responsibilities of the National Park Service.

To date, many benefits have resulted from this partnership. For example, St. Croix National Scenic Riverway in Wisconsin is a NAWQA study site that is gaining valuable and credible information very economically. The program has increased the park's visibility in regard to water quality issues and is also flexible, allowing the park to specify sampling sites and parameters needed to address a pressing resource concern. According to Superintendent Anthony Andersen, "we asked for, and received, calcium data to enable us to predict zebra mussel growth conditions. We hope to continue this involvement." Approximately 200 units of the national park system lie in designated NAWQA study basins and stand to benefit from this partnership.



Researchers collect carp at Lake Mead National Recreation Area, Nevada, as part of NAWQA studies to identify synthetic organic compounds and endocrine system disruptors in the fish.

## National Park Service Units in National Water-Quality Assessment Study Basins





Columbia-Cascades Support Office

Fort Rock State Monument, Oregon, a national natural landmark.

On being a good neighbor

## National Natural Landmarks Program: “on-hold” . . . but holding its own

by Steve Gibbons

Established in 1962, the National Natural Landmarks Program of the National Park Service now includes 587 sites in 48 states, 3 territories, and the Commonwealth of Puerto Rico. In 1996, the program continued to nurture a partnership ethic with the various state, federal, and private landowners. This spirit persists despite a lingering moratorium placed on the program in 1989 that has postponed the nomination, evaluation, and designation of new sites for landmark status. The dissolution of this moratorium hinges on approval of final revised program regulations by the Department of the Interior and Office of Management and Budget.

Even though the moratorium has precluded the addition of new sites to the National Registry of Natural Landmarks, it has provided NPS landmark coordinators across the country with an invaluable opportunity to make strategic improvements to the existing program. Regulations have been revised, all landmark owners have been identified and contacted, the national landmarks database has been updated, and management controls have been established. This inactivity has also given coordinators the time and incentive to become better ambassadors of a new landmark ethic effecting partnerships with many landmark owners.

An iterative tool that has been instrumental in forging better communication with landowners is the annual Section 8 Report, required by the 1970

General Authorities Act, as amended. The Section 8 statute directs the Secretary of the Interior to monitor the status and condition of National Natural Landmarks and annually report to Congress on those that are threatened or damaged. Accordingly, program coordinators make annual visits to landmarks to document their conditions and stay in touch with the landmark owners. Through this process we have learned about concerns of the landmark owners and have been able to dispel many of the myths, fears, and misconceptions pertaining to their rights and the National Natural Landmarks Program. In some instances the process has provided the catalyst for cooperative cost-share arrangements in the protection of landmark sites. A prime benefactor of the developing partnership spirit has been the NPS Challenge Cost-Share Program, which has provided the landmarks program a total cost-share amount in excess of \$135,000 in the Columbia-Cascades Cluster alone.

Though in a “holding pattern” for the past eight years, the National Natural Landmarks Program is once again in good hands, and a healthy partnership among the National Park Service and landmark owners has emerged.

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The moratorium on listing new national natural landmarks gave the National Park Service time to recognize many landmark owners.